AMENDMENTS TO THE CLAIMS

1. (Cancelled)

2. (Cancelled)

3. (Withdrawn, Previously Presented) A method for producing the epitaxial substrate for the compound semiconductor light-emitting device of claim 1, wherein a growth temperature T_1 of the first layer and a growth temperature T_2 of the second layer are made to satisfy the relationship $T_1 \leq T_2$.

4. (Withdrawn, Previously Presented) A method for producing the epitaxial substrate for the compound semiconductor light-emitting device of claim 2, wherein a growth temperature T_1 of the first layer and a growth temperature T_2 of the second layer are made to satisfy the relationship $T_1 \leq T_2$.

5. (Withdrawn, Previously Presented) The method for producing the epitaxial substrate for the compound semiconductor light-emitting device as claimed in claim 3 or 4, wherein the second layer is grown to satisfy the relationships:

$5 \leq d_2 \leq 30,000$ $\quad$ $(900 \leq T_2 \leq 1,150)$

$T_2 \geq 0.4\ d_2 + 700$ $\quad$ $(700 \leq T_2 < 900)$,

where T_2 (°C) is the growth temperature of the second layer and d_2 (Å) is the thickness of the second layer.

6. (Withdrawn, Previously Presented) The method for producing the epitaxial substrate for the compound semiconductor light-emitting device as claimed in claim 3 or 4, wherein the second layer and the third layer are grown by a regrowth method after growth of the first layer.

7. (Withdrawn, Previously Presented) The method for producing the epitaxial substrate for the compound semiconductor light-emitting device as claimed in claim 5, wherein the second layer and the third layer are grown by a regrowth method after growth of the first layer.

8. (Cancelled)

9. (Withdrawn) A light-emitting device utilizing the production method of claim 3.

10. (Previously Presented) An epitaxial substrate for a compound semiconductor light-emitting device comprising:

a double-hetero light-emitting layer structure including a pn junction; and

a p-type layer side layer structure formed in contact with the light-emitting layer structure including in order from the layer in contact with the light-emitting layer structure an n-type first layer represented by $In_xAl_yGa_zN$ ($x + y + z = 1, 0 \leq x \leq 1, 0 \leq y \leq 1, 0 \leq z \leq 1$), an n-type second layer represented by $In_uAl_vGa_wN$ ($u + v + w = 1, 0 \leq u \leq 1, 0 \leq v \leq 1, 0 \leq w \leq 1$) and a p-type third layer represented by $In_pAl_qGa_rN$ ($p + q + r = 1, 0 \leq p \leq 1, 0 \leq q \leq 1, 0 \leq r \leq 1$), each of the three neighbors being formed in contact with its neighbor.

11. (Previously Presented) The epitaxial substrate for the compound semiconductor light-emitting device as claimed in claim 10, wherein the p-type dopant density of the n-type second layer is not less than 1×10^{17} cm^{-3} and not greater than 1×10^{21} cm^{-3}, and the n-type carrier density of the n-type second layer is not greater than 1×10^{19} cm^{-3}.

12. (Previously Presented) The epitaxial substrate for the compound semiconductor light-emitting device as claimed in claim 10, wherein a thickness d_1 (Å) of the first layer is in the range of $5 \leq d_1 \leq 200$ and a thickness d_2 (Å) of the second layer is in the range of $5 \leq d_2 \leq 500$.

13. (Previously Presented) The epitaxial substrate for the compound semiconductor light-emitting device as claimed in claim 11, wherein a thickness d_1 (Å) of the first layer is in the range of $5 \leq d_1 \leq 200$ and a thickness d_2 (Å) of the second layer is in the range of $5 \leq d_2 \leq 500$.

14. (Withdrawn, Previously Presented) A method for producing the epitaxial substrate for the compound semiconductor light-emitting device of claim 10, 11, 12 or 13, wherein a growth temperature T_1 of the first layer and a growth temperature T_2 of the second layer are made to satisfy the relationship $T_1 \leq T_2$.

15. (Withdrawn, Previously Presented) The method for producing the epitaxial substrate for the compound semiconductor light-emitting device as claimed in claim 14, wherein the second layer is grown to satisfy the relationships:

$T_2 \geq 0.4\ d_2 + 700 \qquad (5 \leq d_2 \leq 500)$

$1{,}150 \geq T_2 \geq 700$,

where T_2 (°C) is the growth temperature of the second layer and d_2 (Å) is the thickness of the second layer.

16. (Withdrawn, Previously Presented) The method for producing the epitaxial substrate for the compound semiconductor light-emitting device as claimed in claim 14, wherein the second layer and the third layer are grown by a regrowth method after growth of the first layer.

17. (Withdrawn, Previously Presented) The method for producing the epitaxial substrate for the compound semiconductor light-emitting device as claimed in claim 15, wherein the second layer and the third layer are grown by a regrowth method after growth of the first layer.

18. (Previously Presented) A light-emitting device utilizing the epitaxial substrate for the compound semiconductor light-emitting device of claim 10, 11, 12 or claim 13, and an electrode.

19. (Withdrawn) A light-emitting device utilizing the production method of claim 14, 15, 16 or claim 17.

20. (Previously Presented) The epitaxial substrate for the compound semiconductor light-emitting device as claimed in claim 10, wherein the n-type second layer has a p-type dopant.

21. (Previously Presented) An epitaxial substrate for a compound semiconductor light-emitting device comprising:

a double-hetero light-emitting layer structure including a pn junction; and

a p-type layer side layer structure formed in contact with the light-emitting layer structure including in order from the layer in contact with the light-emitting layer structure an n-type first layer represented by AlGaN, a p-type second layer represented by AlGaN: Mg and a p-type third layer represented by GaN: Mg, each of the three neighbors being formed in contact with its neighbor.